

### REMARKS

The Examiner rejects all of the pending claim in view of Jacobi et al, U.S. 6,317,722 ("Jacobi '722") and Jacobi et al, U.S. 6,064,980 ("Jacobi '980"). Applicant respectfully disagrees for the following reasons.

#### A. Claims 1-15

The Examiner has rejected claims 1, 4-8, 13, and 15 as anticipated by Jacobi '722 and claims 2-3, 10-12 and 14 as obvious in view of Jacobi '722. Applicant disagrees because Jacobi '722 fails to describe or suggest presented the user with an image that *emphasizes one or more aesthetic characteristics or presenting the user with questions that request the user's preferences for one or more of the images presented* as required in claim 1. Similarly, Jacobi does not describe or suggest *viewing an image that visually expresses one or more attribute scales* as required by claim 10 or *receiving user responses that indicate the user's preferences for aesthetic characteristics embodied in one or more images* as required by claims 13 and 15.

Jacobi '722 describes the creation of a user profile that is formed from items or products that a user has purchased, a user's ranking of products or other items a user has used (e.g., a book a user has read, a movie a user has viewed, a restaurant a user has dined, etc.), and products or items that have been placed in or removed from a virtual shopping cart. (See, e.g., Jacobi '722, FIG. 1) Jacobi '722 describes her product-ranking method at column 8, lines 26-37 as follows:

The recommendation service components 44 include a BookMatcher application 50 which implements the above-described BookMatcher service. Users of the BookMatcher service are provided the opportunity to rate individual book titles from a list of popular titles. The book titles are rated according to the following scale:

- 1 = Bad!
- 2 = Not for me
- 3 = OK
- 4 = Liked it
- 5 = Loved it!

Thus, Jacobi presents a very traditional user-rating method in which the user is presented with a *list of popular products or items* (i.e., a list of popular book titles) and asks the user to rate

the products or items on the list that the user has used (i.e., the books the user has read). Independent claims 1, 13 and 15 require displaying to the user *an image that emphasizes (claim 1) or embodies (claims 13 and 15) one or more aesthetic characteristics*. Similarly independent claim 10 requires *viewing an image that visually expresses one or more attribute scales*. Jacobi '722 only describes presenting the user with a list of popular products or items and plainly does not disclose presenting the user with a set of images that emphasize or embody a particular aesthetic characteristic. Jacobi '722 also does not describe or suggest *viewing an image that visually expresses one or more attribute scales*.

Moreover, Jacobi does not teach or suggest asking the user to rate indicate his or her preferences for *an aesthetic characteristic embodied or emphasized in an image* as required by claims 1, 13, and 15. Rather, Jacobi asks the user to rate products or items that the *user has used* (e.g., a book the user has read, a restaurant the user has dined, etc.). In contrast, the present claims require obtaining a response that indicates the user's preferences, not for an item that the user has used, but for aesthetic characteristics *emphasized or embodied in an image*.

Because Jacobi fails to teach or suggest these limitations, Applicant respectfully submits that independent claims 1, 10, 13, and 15 are allowable. For the same reasons, Applicant submits that the dependent claims 2-8, 12-13, and 14 are also allowable.

#### **B. Claims 16-23**

The Examiner has rejected claims 16-23 as obvious in view of Jacobi '980. The Applicant respectfully disagrees for the following reasons.

With respect to independent claim 16, Jacobi '980 does not describe or suggest either (i) *presenting a set of images to a user* or (ii) *receiving input from the user indicating the user's preferences for aesthetic characteristics expressed in one or more of the images*.

Jacobi '980 further describes the "BookMatcher" application that may be incorporated within an electronic catalog (e.g., the Amazon.com website) to assist in providing product recommendations to a user browsing the catalog. As explained in Jacobi '980, the BookMatcher application presents a product or item that the user has used (e.g., a book the user has read, a restaurant the user has dined, etc.) and asked the user to rate the item on a scale (i.e., "liked it", "loved it!", "bad" or "don't know"). The BookMatcher application, however, does not present the user with *a set of images*, but rather presents the user with a description of a product or item

that the user may have used. (See, e.g., Jacobi '980, FIG. 4) Nor does the BookMatcher application describe *receiving input from the user indicating the user's preferences for aesthetic characteristics expressed in an image* as required in claim 16

In the February 3, 2003 Office Action, the Examiner argues that Jacobi '980 discloses presenting a set of images to a user at column 2, lines 15-33 and column 4, lines 5-12. (Office Action, Feb. 3, 2003, pg. 9) However, neither of these passages discloses presenting a user with a set of images for determining a user's aesthetic preferences. Rather, at column 2, lines 15-33 Jacobi simply describes a preferred embodiment of Jacobi's product recommendation service (i.e., the BookMatcher application) that is implemented in a browsable catalog of items. Similarly, column 4, lines 5-12 simply states that the "BookMatcher" application may also be extended to apply to recommending movies, music, restaurants, news services, and television shows. Nowhere do either of these passages describe or suggest *presenting a user with a set of images* as part of a method for determining the user's aesthetic preferences as required by claim 16.

The Examiner also argues that Jacobi '980 discloses receiving input from the user indicating the user's like or dislike of one or more images in the set of images at column 7, lines 55-67. However, this passage from Jacobi '980 describes an interface in which the user rates a book title, and does not suggest *receiving input from the user indicating the user's preferences for aesthetic characteristics expressed an image*.

Thus because Jacobi '980 fails to disclose or suggest either of these limitations, the Applicant respectfully requests that independent claim 16, as well as its dependent claims 17-23 be allowed. Moreover, dependent claims 17-23 provide additional features that further distinguish them over Jacobi '980.

For example, Jacobi '980 does not disclose *displaying an image to a user that emphasizes an aesthetic characteristic* as required in claim 17. The Examiner recognizes this point, but argues that because Jacobi '680 indicates that books may fall within various genres at column 2, lines 35-45, it would have been obvious to one of ordinary skill in the art "to employ a certain aesthetic characteristic to get the benefit of a more specialized, focused feedback." The Applicant respectfully submits that the Examiner has misconstrued this passage from Jacobi '980. The BookMatcher application recommends books to a user by correlating the ratings of

one user with other users of the system. (Jacobi '980 at 5:7-10) Thus if a user indicates a preference for "*Catcher in the Rye*," the BookMatcher service may do a search and find that a large number of other users who liked "*Catcher in the Rye*" also liked "*The Firm*." The BookMatcher service would then recommend "*The Firm*" to the user. Thus, in order for the BookMatcher service to work, it needs a pre-existing database of user recommendations upon which to conduct this correlation. Column 2, lines 35-45 of Jacobi '980 cited by the Examiner describes how to establish an initial database of user recommendations in order to bring BookMatcher application on-line, namely by having a group of "pre-release users" rate a small set of books in the most popular genres. This passage from Jacobi '980 clearly does not teach or suggest *presenting a user with an image that emphasizes one or more aesthetic characteristics in order to receive a response from the user indicating the user's preference for the aesthetic characteristics expressed in that image*. Accordingly, Applicant submits that claim 17 includes features that further distinguish it over Jacobi '980.

With respect to claim 18, the Examiner recognizes that Jacobi '980 does not disclose or suggest presenting an image that emphasizes form, material, decoration, overall appearance, and/or novelty. However, the Examiner concludes that these are "old and well known and would have been obvious to one skilled in the art at the time of the invention." Applicant respectfully disagrees. Jacobi '980 does not provide the slightest hint of presenting a user with an image that emphasize any one of these aesthetic characteristics. Rather Jacobi '980 simply teaches a method in which a user rates a product or service that user has used. Accordingly, Applicant submits that claim 18 includes features that further distinguish it over Jacobi '980.

With respect to claim 19, Applicant submits Jacobi '980 does not describe or suggest *presenting the user with a scale in which to grade the strength of the user's preferences for one or more aesthetic characteristics expressed in an image*. While the Examiner correctly points out that Jacobi '980 shows presenting a user with a scale to grade a user's preference, Jacobi only teaches using this scale to have a user rate an item the user has used. Jacobi plainly does not disclose or teach presenting a scale in which to grade the strength of the user's preferences for an image viewed by the user. Accordingly, Applicant submits that claim 19 includes features that further distinguish it over Jacobi '980.

With respect to claim 20, Jacobi '980 does not describe or suggest assembling a user's aesthetic profile by *having a user select images from a set of images*. Examiner argues that Jacobi '980 discloses this limitation in Fig. 4 and at col 7 lines 55-67. Both of these excerpts from Jacobi '980, however, describe an interface where a user rates book titles, and does not at all describe having a user select images from a set of images. Accordingly, Applicant submits that claim 20 includes features that further distinguish it over Jacobi '980.

With respect to claim 21, Applicant submits that this claim should be allowed for the same reasons that claims 16 and 17 should be allowed.

With respect to claim 22, Jacobi '980 does not describe or suggest any *determination of whether a user has given a consistent response* to a book or item that the user has been asked to rate. The Examiner argues that Jacobi '980 describes this feature at col 6 lines 50-65, col 7 lines 10-30, col 9 lines 55-65, and claims 1-3. These passages, however, state that the BookMatcher service requires the user to rate a minimum number of book titles before the program will generate a product recommendation for the user. This is quite different from determining whether a user has given *consistent responses to an aesthetic characteristic*, and, accordingly, Applicant submits that claim 22 includes features that further distinguish it over Jacobi '980..

With respect to claim 23, Jacobi '980 does not describe or suggest *sending a user a test set of images the emphasize an aesthetic characteristic or comparing the user's response to the test set of images to prior user responses to determine if a consistent response has been given*. Jacobi '980 does not teach or disclose any method in which a user's profile is tested. Rather, as explained above, the passages cited by the Examiner on this point simply disclose that, in the BookMatcher system, recommendations will not be presented to the user until the user has rated a predetermined number of items. Because Jacobi '980 does not teach any testing of an individual's responses, Applicant respectfully submits that claim 23 includes features that further distinguish it over Jacobi '980.

### C. Claims 24-26

The Examiner has rejected claims 24-26 as obvious in view of Jacobi '980. Applicant disagrees because Jacobi '980 does not teach a method for determining a *product* profile. Rather, Jacobi '980 teaches a method for creating a series of user profiles that includes users' ratings of products that the users' have used (e.g., books users have read). The Jacobi

"BookMatcher" system then generates recommendations for a user by correlating the preferences of one user with the preferences of *other users*. (Jacobi '980 at 5: 7-10). Nowhere in Jacobi '980 is a method for establishing any type of *product profile* disclosed or suggested.

In addition, Jacobi '980 does not describe or suggest *grading one or more aesthetic characteristics of a product on a scale*. Rather the passages cited by the Examiner on this point describe a user rating an item that the user has used (e.g., rating how well a user liked a book). Nothing in Jacobi '980 describes or suggests grading an aesthetic characteristic of a product (e.g., grading the "openness" of a chair) on a scale.

For both of these reasons, Applicant submits that claims 24-26 should be allowed.

#### **D. Claims 27-34**

The Examiner has rejected claims 27-32 as obvious in view of Jacobi '722. Applicant respectfully disagrees because nowhere does Jacobi '722 describe or suggest combining two user profiles to create a composite user profile.

The Examiner cites Figure 3 (items 102, 102A, 104, 104A, 108, 108A), columns 13-15 (especially col 15, lines 50-55) and claim 1 in support of her argument that Jacobi '722 discloses combining user profiles to create a composite profile. As explained below, none of these excerpts from Jacobi '722 describe combining two user profiles to create a composite user profile.

Figure 3 of Jacobi '722 illustrates a process that generates a "similar items table that reflects the most recent purchase history" of all products offered for sale on an on-line catalog. (Jacobi '722 at 12:14-16). During the generation of the "similar items table," Jacobi '722 describes the creation of a "first table 102" that "maps individual customers to the items they purchased" and "a second table 104A" that "maps items to the customers that purchased such items." (12:50-53). From these tables, the Jacobi system identifies the most popular items by selecting the items that "were purchased by more than a threshold (e.g., 30) number of customers." In step 108, the process then goes on to look at the number of customers that are in common between a popular item and other items in order to develop correlations between products. In this way, when a user places a item (e.g., book "A") in an electronic shopping cart, the Jacobi '722 system can tell the user that people who bought book "A" also bought books "X", "Y", and "Z". Clearly, this process described in Figure 3 of Jacobi '722 has nothing to do with the generation of any user profiles, let alone a composite user profile of two or more users.

In columns 13-15 of Jacobi '722, Jacobi largely describes the operation of her "Instant Recommendation Service." This service presents a user with a list of other items that have been purchased by other users who purchased the item a user has placed in his or her shopping cart. The text describes how the Jacobi system assigns weights to items from the "similar items table" (described in Fig. 3) in attempt to recommend the most relevant items to the user. The particular passage emphasized by the Examiner, i.e., col 15, lines 50-55, simply states that the weighted items are merged onto a single list and scores for like items are summed. From this step, Jacobi ranks the items with the highest scores and presents those items as recommendations to the user. Again, this process has nothing to do with the generation of a user profile and clearly does not even remotely suggest combining two user profiles to form a composite user profile.

With respect to claim 1 of Jacobi '722, this only speaks of "combining the sets of similar *items*" in order to provide recommended products for a user. Again, nothing about claim 1 suggests combining *user* profiles to generate a *composite user profile*.

Thus, for all of these reasons, Applicant respectfully requests that claim 27, along with its dependent claims should be allowed. Moreover, dependent claims 28-34 include features that further distinguish them from Jacobi '722.

For example, Jacobi '722 does not describe or suggest forming a composite user profile by averaging values corresponding to two users' preferences as required by claim 29. Nor does Jacobi '722 describe or suggest assigning weight factors to values associated with users' preference for an aesthetic characteristic as required by claim 30. The Examiner argues that Jacobi '722 discloses these feature where it states "the similar items lists read from the table are appropriately weighted (prior to being combined) based on the indicia of the user's affinity for or current interest in the corresponding items of known interest." (Office Action, Feb. 3, 2003, pg. 7) This passage, however, is clearly discussing weighting *items* retrieved from the similar items table before presenting recommended items to a user. The passage does not suggest averaging or weighting *user preferences* (or user preferences for aesthetic characteristics). Accordingly, Applicant submits that claims 29 and 30 include features that further distinguish them from Jacobi '722.

Nor does Jacobi '722 teach or suggest receiving input from a user indicating how a first and second user's profile should be combined as required in claim 30 or presenting the first or

Applicant : David Hornstein  
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second user with one or more questions to determine how the users' profiles should be combined as required in claim 31. Thus, claims 30 and 31 are further distinguished over Jacobi '722.

For all of these reasons, Applicant respectfully requests that all pending claims be allowed.